SPECIFICATION

TITLE OF INVENTION

OVERFLOW SENSITIVE ARITHMETIC INSTRUCTION OPTIMIZATION USING CHAINING

Cross Reference to Related Applications

[001]   This Application is a continuation-in-part of co-pending application serial no.

10/686,513 filed on October 14, 2003 in the name of inventors Zhiqun Chen and Judith Schwabe

and entitled "Optimization of N-Base Typed Arithmetic Expressions", Attorney Docket No.

SUN-P4171CNT2, which is a continuation of co-pending application Serial No. 10/002,437 filed

November 1, 2001 in the name of inventors Zhiqun Chen and Judith Schwabe and entitled

Now U.S. patent 6,687,898,

"Optimization of N-Base Typed Arithmetic Expressions", Attorney Docket No. SUN-

P4171CNT, which is a continuation of application serial no. 09/439,113 filed November 12,

1999 (now U.S. Pat. No. 6,363,523) in the name of inventors Zhiqun Chen and Judith Schwabe

and entitled "Optimization of N-Base Typed Arithmetic Expressions", Attorney Docket No.

SUN-P4171, commonly assigned herewith.

[002]   This application is related to the following:

09/243,101

U.S. Patent Application Serial No. 09/23,101, filed February 2, 1999 in the name of

inventors Joshua Susser and Judith Schwabe and entitled "Object-Oriented Instruction Set for

Resource-Constrained Devices", Attorney Docket No. SUN-P-3729, commonly assigned

herewith.

10/712,475   *,Now U.S. patent 7,010,786,*

U.S. Patent Application Serial No. ___/___, filed November 12, 2003 in the name of

inventors Judith Schwabe and Zhiqun Chen, entitled "Predictive Arithmetic Overflow

Detection", Attorney Docket No. SUN-P8742, commonly assigned herewith.

10/712,463

U.S. Patent Application Serial No. ___/___, filed November 12, 2003 in the name of

inventors Judith Schwabe and Zhiqun Chen, entitled "Optimization of N-Base Typed Arithmetic

Instructions via Rework", Attorney Docket No. SUN-P4181, commonly assigned herewith.

10/712,919   *,Now U.S. patent 7,107,581,*

U.S. Patent Application Serial No. ___/___, filed November 12, 2003 in the name of

inventors Judith Schwabe and Zhiqun Chen, entitled "Overflow Predictive Arithmetic Instruction

Optimization Using Chaining", Attorney Docket No. SUN-P8744, commonly assigned herewith.

FIELD OF THE INVENTION

[003]   The present invention relates to the field of computer science. More particularly, the

present invention relates to a system and method for overflow sensitive arithmetic instruction

optimization using chaining.